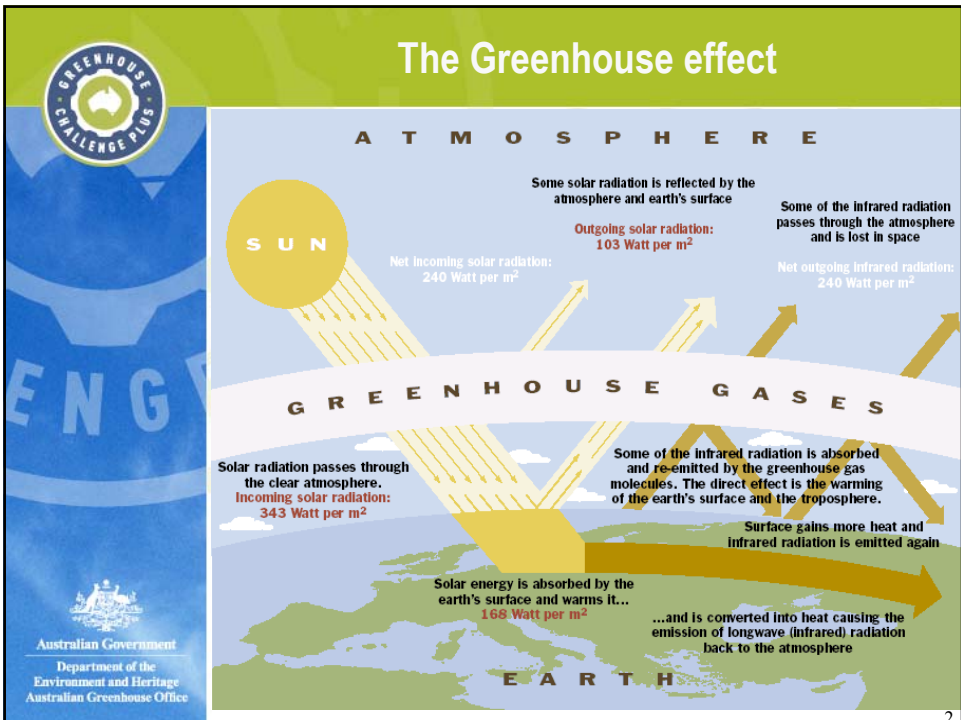


Greenhouse Challenge Plus

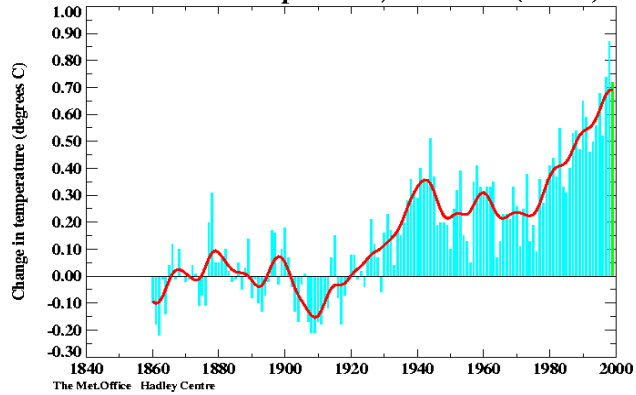
Presentation by
Kathryn Anthonisz
Director, Greenhouse Challenge Team, Australian Greenhouse Office
October 2006





Global warming

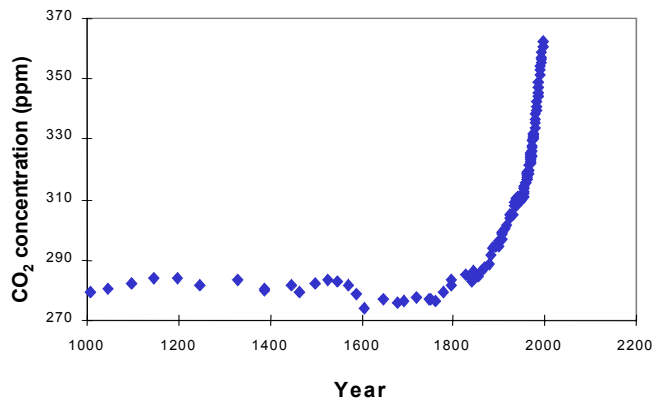
Global surface temperatures, 1860 - 1999 (March)



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Atmospheric Carbon Dioxide Concentrations (ppm) 1000-1999 AD



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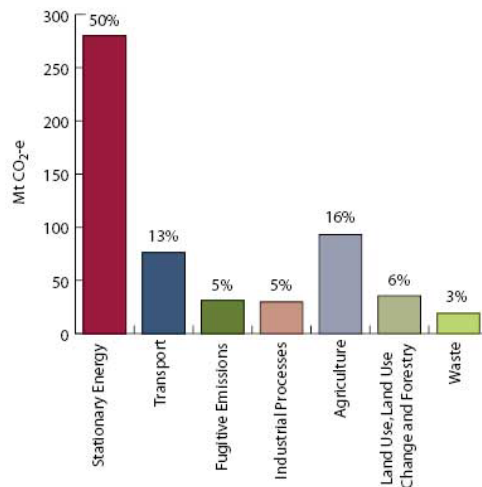


Future Changes in Australia's Climate


- Temperature increase, hotter summers and fewer winter frosts
- In the north, drier in winter and spring, wetter in summer
- In the south, mainly drier, especially in spring
- Increased frequency of dry seasons, particularly in spring
- Increases in the daily rainfall intensity
- Increased evaporation
- Reduced flows in inland waterways (12% to 35% in the MDB by 2050)




Australia's greenhouse gas emissions by sector in 2004



Greenhouse Challenge Plus



- **What is the Greenhouse Challenge Plus Programme?**
- **Incorporates Greenhouse Friendly and Generator Efficiency Standards into a single Industry Partnerships Programme**
- **Funding is provided until 30 June 2008**


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Greenhouse Challenge Plus



GREENHOUSE CHALLENGE

GREENHOUSE FRIENDLY

GENERATOR EFFICIENCY STANDARDS

CHALLENGE PLUS – INDUSTRY PARTNERSHIPS
AN INDUSTRY-GOVERNMENT GREENHOUSE PARTNERSHIP

CORPORATE PERFORMANCE	CAN USED TO FULFIL LEADER ACHIEVEMENTS	
 LEADER 2005	PRODUCT/SERVICE PERFORMANCE	TECHNICAL PERFORMANCE
 MEMBER		GENERATOR EFFICIENCY STANDARDS
CORPORATE PERFORMANCE	MUST PROVIDE BASIC REPORTING AND IMPLEMENT AN ACTION PLAN TO REDUCE EMISSIONS	


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Aims

- Reduce greenhouse gas emissions
- Accelerate uptake of energy efficiency
- Integrate greenhouse issues into business decision making
- Provide more consistent reporting of greenhouse gas emission levels



New aspects of GCP

- **Greenhouse Challenge Plus Leaders**
 - A new member category to distinguish members who are leaders in greenhouse gas management.
 - Leaders set short and long term targets and report against them.
 - Greater degree of public reporting on greenhouse management activities.
- **A new online reporting functionality for all participants**
- **Working towards a Greenhouse Challenge Plus abatement register for participating companies to record their abatement actions**



Challenge Plus – new initiatives for agriculture

A targeted approach

- Ag is significant emissions source: 16% of NGGI
- And a loss of resources from farming systems:
 - 10% of feed energy consumed by livestock lost as methane
 - 35-75% of fertiliser nitrogen goes missing – including as N₂O.
- So, potential for multiple benefits through emissions abatement.

However

- Emissions from agriculture are different:
 - Highly diffuse
 - Highly variable over both space and time
- Creates difficulties in measurement and reporting
- A number of targeted initiatives to address these challenges.



Challenge Plus –new initiatives for agriculture

Key initiatives for 2006/07

- **Agriculture-specific reporting framework**
 - To overcome difficulties with emissions-based reporting
 - Action-based, linked to 'best practice'
- **Guide to good greenhouse practice for ag**
 - To assist members identify opportunities for cost-effective abatement
- **Ongoing research & development**
 - To build capacity for measuring and managing emissions.



New membership requirements for some

- **The Energy White Paper introduced two initiatives for obligatory membership including:**
 - Proponents of large energy resource projects
 - >\$3 million fuel tax credits



Fuel Tax Credits

- **Obligatory membership of GCP for businesses claiming more than \$3 million in fuel tax credit**
- **Commenced 1 July 2006**
- **About 120 businesses will need to become members**
- **Business that use over 8 million litres of fuel off road and/or 16 million litres on road**




Membership

- **Currently has around 780 members**
- **Existing agreements cover over 1,000 operating sites and facilities throughout Australia**
- **GCP members come from all states and territories**
- **Since 1995 members have reported savings of over 26 Million tonnes of CO₂e**
- **Nearly total coverage in some sectors (aluminium, electricity, and cement production)**




Participation in the Programme

- **Participation in the Programme is via an agreement that includes:**
 - An inventory of greenhouse gas emissions
 - A commitment to reduce these emissions
 - An action plan
 - A commitment to participate in Independent Verification
- **Progress reporting is an essential element of Greenhouse Challenge Plus membership**
 - Members report annually on progress and make a public statement about these outcomes



Improved Reporting Framework

- Greenhouse Challenge Plus is a single entry point for greenhouse reporting
- Alignment with emerging international frameworks (WRI/WBCSD and ISO)
- Nationally consistent reporting


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Online Report

Challenge - Data Entry - Microsoft Internet Explorer

Menu

- Home
- Enter Data
- Entity details
- Contact details
- Switch entity
- My details
- Reports
- Logout


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Active

National Products

Current reporting period: **1/01/2003 to 31/12/2003** Region: **ACT**

Selected reporting period: **1/01/2003 to 31/12/2003** **This data is not submitted and is unlocked.**

Primary contact: **Rohan Whitmore** Industry advisor: **Veronica Simbol**

Version 5.22, 5.22

Category / Fuel Type	Start Date	End Date	Quantity	Cost	Base Unit	Emissions (tonnes CO ₂ e)
<input type="checkbox"/> Stationary energy <input type="button" value="FT"/> <input type="button" value="Info"/>	01/01/2003	31/12/2003		\$	275 GJ	29.51
Natural gas	Bill Entry 01/01/2003	31/12/2003	<input type="text" value="231"/> GJ	\$	231 GJ	16.47
Electricity	Bill Entry 01/01/2003	31/12/2003	<input type="text" value="12,360"/> kWh	\$	44.5 GJ	13.04
<input type="checkbox"/> Transport energy <input type="button" value="FT"/> <input type="button" value="Info"/>	01/01/2003	31/12/2003		\$	29,719 GJ	2,041
Automotive gasoline	Bill Entry 01/01/2003	31/12/2003	<input type="text" value="369"/> kL	\$	12,620 GJ	928
LPG	Bill Entry 01/01/2003	31/12/2003	<input type="text" value="326"/> kL	\$	8,378 GJ	507
Standard ULP	Bill Entry 01/01/2003	30/09/2003	<input type="text" value="255"/> kL	\$	8,721 GJ	606
<input type="checkbox"/> Waste <input type="button" value="FT"/> <input type="button" value="Info"/>	01/01/2003	31/12/2003		\$		1,228
Waste - co-mingled	Bill Entry 01/01/2003	31/12/2003	<input type="text" value="1,023"/> tonnes	\$	1,023 tonnes	1,228
Totals	01/01/2003	31/12/2003		\$	29,994	3,298



Independent Verification

- **All members are expected to be verified at some stage**
- **Selection to be verified is currently random**
- **Verification improves the credibility of the Programme**
 - Verification also provides benefits to members
 - It allows better understanding of Greenhouse Gas monitoring, record-keeping and reporting
 - This can lead to more informed and better decision making
- **Successful verification relies on good record keeping**
- **All Greenhouse Friendly product/service and abatement providers must undergo verification**



Partnership Committee

- **Industry-Government Greenhouse Partnership Committee**
- **Primary forum for formulating positions on the development of GCP**
 - Foster collaborative participation in the programme
 - Promote wider participation
 - Advise on implementation issues

Comprises industry associations, individual members and Government organisations



Benefits

- **Provided with an online GG emissions, energy and waste reporting framework with National and Internationally accepted protocols**
- **Developing a partnership with government to find practical and cost-effective ways of managing GG emissions**
- **Members become part of a network that includes other businesses carrying out similar activities**



More Benefits

- **Good corporate citizenship – demonstrating commitment to tackling major environmental issue**
- **Implementing cost effective abatement actions will lead to improved profitability and corporate image**
- **Promotion of achievements – success stories and annual awards**
- **GCP logo**



Some examples

Woodside

- **Decreased emissions by 6.5% since joining the programme through a number of measures such as:**
 - reduced flaring on oil platforms
 - Improved process efficiencies at their LNG plants

***REDUCED GREENHOUSE GAS EMISSIONS BY
180,000 TONNES PER YEAR!***



Some Examples

Cement Industry Federation

- **Reported emissions reductions of 1.5 million tonnes CO₂ since joining the Greenhouse Challenge Plus programme through a number of measures such as:**
 - Energy efficiency and greater use of alternative energy sources
 - Use of supplementary raw materials such as slag from steelmaking and fly ash from coal-fired electricity generation

***GREENHOUSE GAS REDUCTION OF OVER 20% PER
TONNE OF CEMENTITIOUS MATERIAL PRODUCED***



Extractive Industries

- Energy Intensive by nature
- Often have high process emissions
- High levels of material movement



So.....

Your commitment to Greenhouse Challenge Plus means that the environment isn't the only winner

www.greenhouse.gov.au/challenge/index.html